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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,607	06/29/2001	Janne Petri Rinne	442-010429-US(PAR)	7208

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EXAMINER	
JEAN GILLES, JUDE	
ART UNIT	**PAPER NUMBER**
2143	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/896,607	RINNE ET AL.	
	Examiner	Art Unit	
	Jude J. Jean-Gilles	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Action is in regards to the Reply received on 11/16/2005.

Response to Appeal Brief Filed

1. This action is responsive to the notice of appeal filed on 11/16/2005. No claims were amended. There are no newly added claims. Claims 1-8 are pending. Claims 1-8 represent a method and apparatus for "quality of service definition for data streams."

Response to Arguments

2. Applicant's arguments with respect to claim 1 has been carefully reviewed by the examiner, and is considered substantially persuasive. The grounds of rejection as presented in the Final Office Action have been withdrawn by the Examiner, and prosecution of all pending claims of this application is reopen.

However, Applicant's arguments for appeal are deemed moot in view of the following new ground of rejection as explained here below.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 1-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumelski et al (U.S. 6,377,996) B1 in view of Sen et al (Sen), U.S. Patent No. 6,765,909 B1.

Regarding **claim 1**,Lumelski teaches the invention substantially as claimed. Sen discloses a method for applying a certain Quality of Service (QoS) to a data stream of an application executing in a terminal device communicating data over a sockets connection (*fig. 2, and fig. 3*), wherein the method comprises:

providing a uniquely identifiable identifier (UID, Stream Type) to at least one of the application and the data stream from or to the application (*column 6, lines 7-47; column 10, lines 33-47*);

communicating from said terminal device to the network the QOS parameters to be applied to said at least one of the application and the data stream from or to the application (*column 6, lines 7-47; column 10, lines 33-47*); however Lumelski does not disclose the details of "determining an association between said identifier and a particular QOS policy in a database stored in said terminal device ; and determining in said terminal device QOS parameters contained in the QOS policy;

In the same field of endeavor, Sen discloses a method in which " *The QoS classifier maps the TCP/IP packet stream to a QoS class based on destination address and destination port. The IPHC maps the TCP/IP packet stream to a context ID. The context ID is utilized in the QoS adaptation Interface to classify PPP packets based on the context ID to QoS class mapping. If the determination is made that the connection number is known, the process passes to step 610, which depicts the QoS*

adaptation interface (or QoS Adaptation Sublayer) checking the connection number table for a corresponding port and classifying the packet based on the context ID. The process then passes to step 612, which illustrates a determination of whether the signal enters the classifier from the network or from the air (signal transmitted to a base station)...[see Sen, column 7, lines 13-27]. Furthermore, Sen teaches "...The classification application applies the appropriate Quality of Service level as determined from a user database and a list of available Quality of Service levels. If the connection has no table entry, the TCP/IP application is identified based on comparison to a pre-loaded table of port numbers and a new entry ID is created

in the connection number table)...[see Sen, column 3, lines 34-40].

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Sen's teachings of a method to find connection or association between Identifier of a data stream of an application, Qos parameters and Qos policy of a network in a database, with the teachings of Lumelski, for the purpose of "*measuring and providing specific levels of quality of communication within a wireless network*" as stated Sen lines 17-20 of column 1. Lumelski also provides motivation to combine by stating "provides a highly available streaming capability used to assist a primary server, such as a mainframe or video-on-demand server, to temporarily offload a client currently engaged in a streaming session with the primary server onto the auxiliary server so as to create a window of increased resource availability at the primary server"...in column 4, lines 14-20. By this rationale **claim 1** is rejected.

Regarding claim 2: The combination Lumelski-Sen teaches a method according to claim 1, wherein the method comprises transferring the identifier (UID, Stream Type) over the sockets connection (see Lumelski; fig. 4, item 250; column 7, lines 1-27).

Regarding claim 3: The combination Lumelski-Sen teaches a method according to claim 1, wherein the method further comprises:

providing a socket application program interface to the application (see Lumelski; fig. 4, item 250; column 7, lines 1-27),

establishing a socket for transfer of the data stream (see Lumelski; fig. 4, item 250; column 7, lines 1-27)., and

transferring the identifier (UID, Stream Type) over the socket application program interface to uniquely identify said at least one of the particular application and the particular data stream, which application or data stream is identified by the identifier, in order apply the particular QoS to the data stream being communicated over the sockets connection (see Lumelski; fig. 4, item 250; column 7, lines 1-27).

Regarding **claim 4**, The combination Lumelski-Sen teaches a device comprising;

an application program for executing a particular application (see Lumelski; *column 6, lines 7-47; column 10, lines 33-47*),

means for communicating data over a sockets connection, wherein the device further comprises (see Lumelski; fig. 4, item 250; column 7, lines 1-27);

means for providing a uniquely identifiable identifier (UID, Stream Type) at least one the application and the data from or the application (see Lumelski; *column 6, lines 7-47; column 10, lines 33-47*);

means for determining an association between said identifier and a particular QoS policy in a database stored in said device *[see Sen, column 3, lines 34-40; column 7, lines 13-27];*

means for determining in said device the QoS parameters contained in the QoS policy *[see Sen, column 3, lines 34-40; column 7, lines 13-27];* and

means for communicating from said device to the network the QOS parameters to be applied to said at least one of the application and the data stream from or to the application (see Lumelski; *column 6, lines 7-47; column 10, lines 33-47*).

Regarding **claim 5**, The combination Lumelski-Sen teaches a device (*fig. 11, items 18, 10; the device here is represented by the priority server 18 or client server 10 sitting on its own device whereas the invention discloses both client and server seating on the same device. It is inherent in the computer art to have both server and client software residing on the same device*) comprising:

an application program for executing a particular application (see Lumelski; *column 6, lines 7-47; column 10, lines 33-47*),

means for communicating data over a sockets connection, wherein the device further comprises (see Lumelski; fig. 4, item 250; column 7, lines 1-27);

means for associating a centrally defined identifier (UID, Stream Type) to , at least one of the application and the data from or to the application (see Lumelski; *column 6, lines 7-47; column 10, lines 33-47*),

means for determining an association between said identifier and a particular QOS policy in a database stored in said device *[see Sen, column 3, lines 34-40; column 7, lines 13-27];*

means for determining in said device the QoS parameters contained in the QoS policy *[see Sen, column 3, lines 34-40; column 7, lines 13-27]*; and

means for communicating from said device to the network the QOS parameters to be applied to said at least one of the application and the data stream from or to the application (see Lumelski; *column 6, lines 7-47; column 10, lines 33-47*).

Regarding claim 6: The combination Lumelski-Sen teaches a device (fig. 11, items 18, 10; The device here is represented by the priority server 18 or client server 10 sitting on its own device whereas the invention discloses both client and server seating on the same device. It is inherent in the computer art to have both server and client software residing on the same device) according to claim 4 or 5, wherein the device further comprises

means for providing a socket application program interface to the application (see Lumelski; fig. 4, item 250; column 7, lines 1-27);

(see Lumelski; fig. 4, item 250; column 7, lines 1-27); and

means for transferring the identifier (UID, Stream Type) over the socket application program interface to uniquely identify said at least one of the particular application and the particular data, which application or data is identified by the identifier, in order apply the particular QoS to the data being communicated over the sockets connection (see Lumelski; *column 6, lines 7-47; column 10, lines 33-47*),

Regarding **claim 7**, The combination Lumelski-Sen teaches a computer program product for an electronic device having an application to communicate data over a sockets connection, wherein in that the computer program product comprises;

computer program means for providing a uniquely identifiable identifier (UID, Stream Type) to at least one of the application and the data from or to the application (see Lumelski; *column 6, lines 7-47; column 10, lines 33-47*),

computer program means for determining an association between said identifier and a particular QOS policy in a database stored in said electronic device

computer program means for determining said electronic device the QoS parameters contained in the QoS policy *[see Sen, column 7, lines 13-27]*and

computer program means for communicating from said electronic device to the network the QoS parameters to be applied to said at least one of the application and the data stream from or to the application (see Lumelski; *column 6, lines 7-47; column 10, lines 33-47*),

Regarding claim 8: The combination Lumelski-Sen teaches a computer program product according to claim 7, wherein the computer program product further comprises:

computer program means for providing a socket application program interface to the application (see Lumelski; *column 6, lines 7-47; column 10, lines 33-47*),

computer program means for establishing a socket for transfer of the data (see Lumelski; fig. 4, item 250; column 7, lines 1-27); and

computer program means for transferring the identifier (UID, Stream Type) over the socket application program interface to uniquely identify said at least one of the particular application and the particular data, which application or data is identified by the identifier, in order apply the particular QoS to the data being communicated over the sockets connection (see Lumelski; fig. 4, item 250; column 7, lines 1-27; *column 6, lines 7-47; column 10, lines 33-47*).

Response to Arguments

6. Applicant's Request for Reconsideration filed on 11/16/2005 has been carefully considered but is deemed persuasive. The new combination of Lumelski and Sen prior art references, with a reasonable expectation of success teaches all the limitations the above claimed invention as explained in the dtailed office action above.

Conclusion

7. **THIS ACTION IS MADE NON-FINAL**. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-9000.

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Jude Jean-Gilles

Patent Examiner

Art Unit 2143

JJG

February 27, 2006